IN THE CLAIMS

1. (Currently Amended) A method for controlling a user interface of a mobile communication device having at least one sensor, the method comprising:

storing sensor signals indicative of a plurality of external conditions over a period of time;

segmenting said sensor signals into a time sequence of sensor data segments;

storing an indication of an operation performed by the user during at least one of said sensor data segments; and

determining a rule for future operation, the rule corresponding to said sequence of sensor data segments and the operation.

2. The method of claim 1, wherein said rule corresponds to a change in a user interface of the mobile communication device.

3. The method of claim 1, wherein said mobile communication device is a mobile telephone.

4. The method of claim 1, wherein said external conditions include an acceleration, a noise level, a luminosity sensors and a humidity.

5. (Currently Amended) The method of claim 1, wherein said segmenting of sensor signals is ~~perfomed~~ performed substantially in real time with said storing the sensor signals.

6. The method of claim 1, wherein said segmenting of sensor signals is performed after a predetermined amount of said sensor signals are stored.

7. The method of claim 1, wherein said segmenting comprises time series segmentation of the sensor signals.

8. The method of claim 1, wherein said determining said rule includes downloading a rule from an external source.

9. (Currently Amended) The method of claim 1, ~~wherien~~ wherein said storing the sensor signals comprises storing analog sensor data.

10. (Currently Amended) The method of claim 1, ~~wherien~~ wherein said storing the sensor signals comprises storing digital sensor data.

11. The method of claim 1, wherein said determining said rule further comprises storing the rule in a rule database.

12. The method of claim 11, further comprising:

detecting a plurality of external conditions;

searching said rules database to find a rule matching the external conditions; and

performing a function corresponding to the rule.

13. (Currently Amended) A mobile communication device, comprising:

at least one sensor for detecting a ~~purality~~ plurality of external conditions;

a display for presenting a user interface for selecting a plurality of operations;

a memory for storing a plurality of sensor signals from said at least one sensor, said sensor signals indicative of a plurality of external conditions over a period of time;

a processor for segmenting said sensor signals into a time sequence of sensor data segments;

the memory further for storing an indication of an operation performed by the user during at least one of said sensor data segments; and

the processor further for determining a rule for modifying the

user interface based on said <u>sequence of</u> sensor data segments and the operation.

14. (Currently Amended) A mobile communication device, comprising:

means for detecting a ~~purality~~ <u>plurality</u> of external conditions;

means for presenting a user interface for selecting a plurality of operations;

means for storing a plurality of sensor signals from said at least one sensor, said sensor signals indicative of a plurality of external conditions over a period of time;

means for segmenting said sensor signals into a <u>time</u> sequence of sensor data segments;

means for storing an indication of an operation performed by the user during at least one of said sensor data segments; and

means for determining a rule for modifying the user interface based on said <u>sequence of</u> sensor data segments and the operation.

15. (Currently Amended) A computer-readable medium encoded with processing instructions for implementing a method performed by a mobile communication device having at least one sensor, the method comprising:

storing sensor signals indicative of a plurality of external conditions over a period of time;

segmenting said sensor signals into a <u>time</u> sequence of sensor data segments;

storing an indication of an operation performed by the user during at least one of said sensor data segments; and

determining a rule for future operation, the rule corresponding to said <u>sequence of</u> sensor data segments and the operation.

16. The method of claim 1, wherein said sensor signals comprise at least one of:

raw sensor data and pre-processed sensor data.

17. (Currently Amended) A method for controlling a user interface of a mobile - communication device having at least one sensor, the method comprising:

storing sensor signals indicative of particular external conditions;

segmenting said sensor signals into a time sequence of sensor data segments;

storing an indication of an operation performed by the user during said particular external conditions; and

if the operation is performed during a later occurence of the particular external conditions, determining a rule corresponding to the operation performed by the user and the particular external conditions.

18. The method of claim 17, wherein said rule corresponds to a change in a user interface of the mobile communication device.

19. The method of claim 17, wherein said mobile communication device is a mobile telephone.

20. The method of claim 17, wherein said particular external conditions include at least one of: an acceleration, a noise level, a luminosity sensors and a humidity.

21. (Currently Amended) The method of claim 17, wherein said segmenting of the sensor signals is perfomed performed substantially in real time with said storing the sensor signals.

22. The method of claim 17, wherein said segmenting of sensor signals is performed after a predetermined amount of the sensor signals are stored.

23. The method of claim 17, wherein said segmenting of sensor signals comprises time series segmentation of the sensor signals.

24. The method of claim 17, wherein said determining the rule includes downloading a rule from an external source.

25. (Currently Amended) The method of claim 17, ~~wherien~~ wherein said storing the sensor signals comprises storing analog sensor data.

26. (Currently Amended) The method of claim 17, ~~wherien~~ wherein said storing the sensor signals comprises storing digital sensor data.

27. The method of claim 17, wherein said determining the rule further comprises storing the rule in a rule database.

28. The method of claim 27, further comprising:

detecting a plurality of external conditions;

searching said rules database to find a rule matching the external conditions; and

performing a function corresponding to the rule.

29. The method of claim 17, wherein said sensor signals comprise at least one of: raw sensor data and pre-processed sensor data.

30. (Currently Amended) A mobile communication device, comprising:

means for storing sensor signals indicative of particular external conditions;

means for segmenting said sensor signals into a time sequence of sensor data segments;

means for storing an indication of an operation performed by the user during said particular external conditions; and

means for determining a rule corresponding to the operation performed by the user

and the particular external ~~copnditions~~ <u>conditions</u>, if the operation is performed during a later

occurence of the particular external conditions.

31. (Currently Amended) A mobile communication device, comprising:

at least one sensor for detecting a ~~purality~~ <u>plurality</u> of external conditions;

a display for presenting a user interface for selecting a plurality of operations;

a memory for storing sensor signals indicative of particular external conditions;

a processor for segmenting said sensor signals into a <u>time</u> sequence of sensor data

segments;

the memory further for storing an indication of an operation performed by the user

during said particular external conditions; and

the processor further for determining a rule corresponding to the operation

performed by the user and the particular external ~~copnditions~~, <u>conditions</u> if the operation is

performed during a later occurence of the particular external conditions.

32. (Currently Amended) A computer-readable medium encoded with processing

instructions for implementing a method performed by a mobile communication device having at

least one sensor, the method comprising:

storing sensor signals indicative of particular external conditions;

segmenting said sensor signals into a <u>time</u> sequence of sensor data segments;

storing an indication of an operation performed by the user during said particular

external conditions; and

determining a rule corresponding to the operation performed by the user and the particular external ~~copnditions~~, <u>conditions</u> if the operation is performed during a later occurence of the particular external conditions.

33. (Currently Amended) A method for controlling a user interface of a mobile communication device having at least one sensor, the method comprising:

storing sensor signals indicative of a plurality of external conditions over a period of time;

segmenting said sensor signals into a <u>time</u> sequence of sensor data segments;

storing an indication of a plurality of operations performed by the user during at least one of said sensor data segments; and

determining a rule for future operation, the rule corresponding to said <u>sequence of</u> sensor data segments and the plurality of operations.

34. (Currently Amended) A method for controlling a user interface of a mobile communication device having at least one sensor, the method comprising:

storing sensor signals indicative of particular external conditions;

segmenting said sensor signals into a <u>time</u> sequence of sensor data segments;

storing at least one indication of a plurality of operations performed by the user during said particular external conditions; and

if the plurality of operations are performed during a later occurence of the particular external conditions, determining a rule corresponding to the plurality of operations performed by the user and the particular external conditions.

35.   (New) The method of claim 7 wherein the segments are non-overlapping and internally homogeneous.

36.   (New) The method of claim 1 further comprising:

detecting a rule associated with a sequence of sensor data segments that matches a sequence of sensor data segments generated in response to a newly detected plurality of external conditions; and

performing an operation corresponding to the rule.

37.   (New) A method for controlling a user interface of a mobile communication device having at least one sensor, the method comprising:

storing each of a plurality of sensor signals each indicative of an external condition over a period of time;

segmenting each of said plurality of sensor signals into a sequence of time segments, wherein the sequence of the time segments is the same for each of the plurality of sensor signals;

storing an indication of an operation performed by the user during at least one of said time segments; and

determining a rule for future operation, the rule corresponding to a duration of each of said time segments and the operation.